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Equivalents:

## Description

It is known that in their traditional form the brushes generally include/understand a metal ring inside which the whole of silks or hairs is retained and who is fixed at llextrémi- t-piece of a handle. The ring is usually produced by a tinplate band whose transverse ends are assembled one with the other by setting after conformation; its fixing on the handle is generally ensured by fastening. For the reserve of silks or hairs inside the ring, one has usually recourse to two spacers out of paperboard, introduced into the ring and between which is tightened and stuck the mouchet form by the ends of silks or hairs. This traditional manufacture presents a certain number of disadvantages. The realization of the rings by setting implies relatively complex machines and thus burdens in a significant way the cost price of the finished article. This m & E problem of the cotit intervene for the assembly and the assembly of silks or hairs between the holds of épaisseur. La natural metal of the ring causes the fast oxidation of the principal part of the brush, in same time that it accrot in a considerable way the risks of electrocution at the time of the use of the article. It will be still noted that in consequence of its rigidity this type of ring does not suffer any tolerance in the dimensions presented by the end from the brush, whereas this one is subjected to deformations when it is made out of wood. The improvements which are the subject of this invention aim at curing the disadvantages know-indicated. The invention primarily consists in constituting the ring of assembly by a moulded synthetic matter part whose interior wall presents an annular bulge suitable to directly ensure the reserve of the higher part of silks or hairs. According to another provision characteristic of the invention, one makes comprise moulding with the ring of the means suitable to allow the easy assembly and the disassembling of this one on the end of the handle, so that a same handle is suitable for be associated a series of rings of dimensions and/or conformations different. The annexed drawing, given as an example, will make it possible to better include/understand the invention, the characteristics which it presents and the advantages which it is likely to get famous fig. 1 the fitting of the ring of assembly of a brush following the invention. Fig. 2 shows in prospect, before their removable assembly, the end of a handle and the ring of such a brush. Fig. 3 is a horizontal cut according to Iii-iii (fig. 2). Fig. 4 and 5 are transverse sections making include/understand the assembly and the disassembling of the handle. Fig. 6 to 8 are sights of rise illustrating the carac interchangeable stere in the viroles. In fig. 1 reference 1 indicates the lower end of a handle of the usual type, 2 silks of the brush, 3 the ring for the assembly of silks T on handle 1, and 4 staples intended for Y fixing of the aforementioned irole 3 on this handle. Conformément à l'invention, ring 3 is consisted a cast solid part obtained by moulding of a suitable synthetic matter. Its internal wall presents an annular bulge à, so that the fixing of silks 2 by joining does not require any spacer, the above mentioned bulge à directly holding place of the aforesaid holds. It will be noted that the bulge à is connected to the interior wall of the higher ring by uneco-Re left, and on the contrary by a widened lower part relatively long which ensures the correct guidance of silks 2. Il goes from oneself that such a ring 3 does not present any risk of oxidation; the deformable nature of the synthetic matter allows the assembly of a handle 1 whose dimensions do not correspond strictly to the dimension envisaged. The electric insulation is improved owing to the fact that the metal parts are limited to only fasten fixing 4, of very reduced surface. Of course manufacture by moulding allows a very economic cost price. According to a particularly advantageous provision of the

invention, one benefits from the realization of synthetic the matter ring moulded to make him comprise means allowing the removable fixing of the handle. To this end and as shown in fig. 2 to 5, the interior wall of the ring, referred here 13, comprises moulding, above the annular bulge 1a for fixing silks 2, two transverse embossings 13b with profile in form of T which are done opposite on two opposite faces of the aforementioned wall. In addition the lower end of handle 11, made cut of plastic, is cut out of two parallel vertical notches 11a (fig. 3) of which each one leads to one of the faces of the aforementioned end by a widened part 11b; the two 11b parts are envisaged on two opposite faces of the handle and each one of it presents a projection or tooth 1c laid out just above the outlet the notch 11a considered on the final face of the aforesaid handle. Embossings 13b of ring 13 and the notches 11a are dimensioned in way such as in normal position (fig. 3), the transverse bars of the profile in T of the aforesaid embossings 13b butt against the teeth 1c of the widened outlets 11b, so that to engage à fond the end of handle 11 in the free higher part of ring 13, the user must temporarily deform this one by pressure with the manner shown in fig. 4. Once completely inserted on the handle, the ring returns elastically in its normal state and the teeth 1c form again obstinate, while being thus opposed to any inopportune dissociation of the two parts. This removable attachment unit of the handle on the ring makes it possible to use same handle 11 for various types of rings, as illustrated in fig. 6, 7 and 8 which show three types of brushes likely to be obtained using only one and unique handle. It goes without saying such a possibility simplifies considerably the use of the articles by decreasing the cost price by it. Moreover one avoids any metal presence on the brush. It must be heard besides that the description which precedes was given only as an example and which it limits by no means the field of the invention, which one would not leave while replacing the details of execution described by all other equivalents. One conceives in particular that one could imagine other systems for the removable fixing of ring 13 on handle 11 using embossings profiled, interdependent by moulding of the aforementioned ring and clean to cooperate with corresponding recesses envisaged on the handle, while drawing left the elastic deformability of the my synthetic tière.

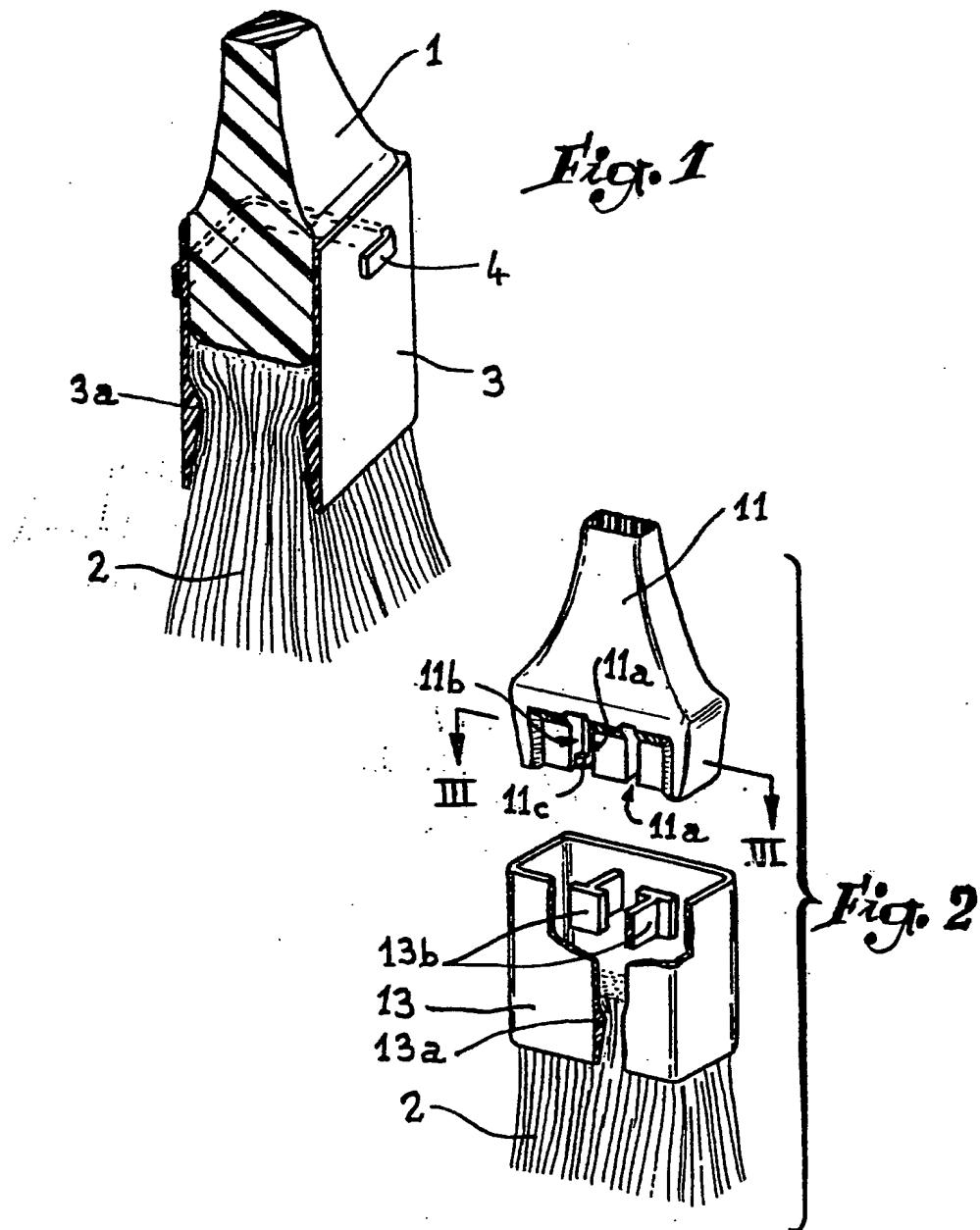
## Claims

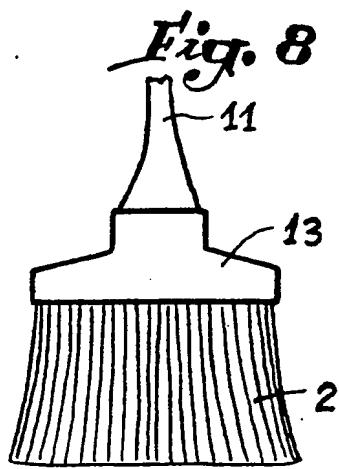
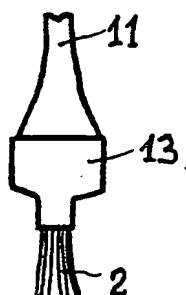
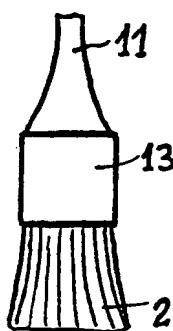
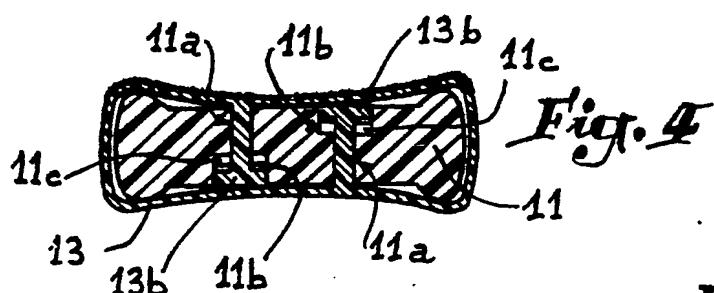
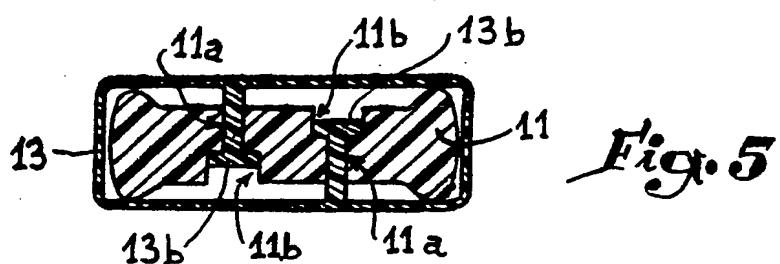
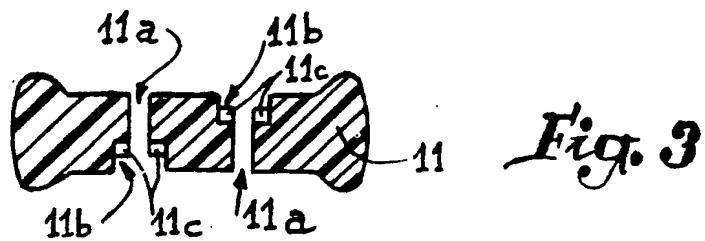
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1. Brush, of the kind in which silks or hairs are retained by joining and wedging inside a ring of assembly made interdependent of the end of a handle, characterized in that the ring, formed by a tubular part obtained by moulding of a synthetic matter, comprises on its interior wall an annular bulge suitable to directly ensure the reserve of the higher part of the hairs or silks.
2. Brush following claim 1, characterized in that the interior wall of the ring is interdependent of means arranged so as to cooperate with average correspondents envisaged on the end of the handle to ensure, while drawing left the elastic deformability of the aforementioned ring, the removable fixing of this one on the aforementioned handle.

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